





Dart Aerospace Ltd.  
1270 Aberdeen St  
Hawkesbury, ON  
K6A 1K7  
Canada

Tel (613) 632-5200

# PURCHASE ORDER PO040866

E-MAILED  
AUG 29 2018

**Supplier:** ACI001-VC  
Acier Ouellette Inc.  
935 Boul. Du Havre  
Valleyfield  
QC  
J6S 5L1 Canada  
Phone: 800 667 4248  
Fax: 450 377 5696

**PO No:** PO040866  
**PO Date:** 8/28/18  
**Due Date:** 8/31/18  
**Purchase Order Revision:**  
**Revision Date:**  
**Ship-To Contact:** Phone:

**Ship To:** 1270 Aberdeen Street  
Hawkesbury  
ON  
K6A 1K7 Canada  
Phone: 613-632-5200

**Via:** Ground  
**Pymt Terms:** Net 30  
**Freight Terms:**  
**Special Comments:** QUOTE NO. SOU0128627, SOU0128223

## Items

Line Item	Job	Part	Supplier Part No	Description	Status	Account	Due Date	Order Quantity	Received Quantity	Balance	Unit Price (CAD)	Extended Price
1		MT-HRS-P-0.750		Hot Rolled Steel Plate 0.750" (44W) : MATERIAL: HOT ROLLED STEEL SHEET ASTM A36 OR ASTM A1011 OR 44W OR ASTM A1018	Firmed	-	8/31/18	32 sf	0 sf	32 sf	\$17.43625/sf	\$557.96
2	A	M6061T6R0.750		6061-T6 Round Bar .750" : MATERIAL: 6061- T6/T651/T6510/T6511/T62 ALUMINUM ROUND BAR AS PER QQ-A-225/8 OR AMS-QQ-A-225/8 OR AMS 4117 4128/4115/4116 OR QQ- AA-200/8 OR AMS-QQ-A- 200/8 OR AMS 4160 OR ASTM B221 OR ASTM B221 receive ft	Firmed	-	8/31/18	60 ft	0 ft	60 ft	\$1.95/ft	\$117.00
3	A	M6061T6R5.000		6061-T6 Round Bar 5.000" : MATERIAL: 6061- T6/T651/T6510/T6511/T62 ALUMINUM ROUND BAR AS PER QQ-A-225/8 OR AMS-QQ-A-225/8 OR AMS 4117 4128/4115/4116 OR QQ- AA-200/8 OR AMS-QQ-A- 200/8 OR AMS 4160 OR ASTM B221 OR ASTM B221 receive ft	Firmed	-	8/31/18	6 ft	0 ft	6 ft	\$97.21666/ft	\$583.30

8/28/2018

## PURCHASE ORDER

Items												
Line Item	Job	Part	Supplier Part No	Description	Status	Account	Due Date	Order Quantity	Received Quantity	Balance	Unit Price (CAD)	Extend Price
4		M303B1.000X1.000		M303B1.000 X 1.000 : MATERIAL: AISI 303 SS BAR AS PER ASTM A582 NOTE: AISI 304/316 NOT ACCEPTABLE receive ft	Firmed	-	8/31/18	24 ft	0 ft	24 ft	\$39.10/ft	\$938.
5	✓ AT	M303R0.625		303 Round Bar 0.625" : MATERIAL: AISI 303 SS ROUND BAR AS PER ASTM A582 NOTE: 304/316 NOT ACCEPTABLE receive ft	Firmed	-	8/31/18	12 ft	0 ft	12 ft	\$6.236666/ft	\$74.8
6	AT	MT-H13-R0.625		AISI H13 Tool Steel Round Bar : MATERIAL: AISI H13 TOOL STEEL ROUND BAR AISI H13	Firmed	-	8/31/18	12 ft	0 ft	12 ft	\$6.95/ft	\$83.40
7	AT	M304R1.000		304 Round Bar 1.00 : MATERIAL: AISI 304/316 SS ROUND BAR AS PER ASTM A276 NOTE: AISI 303 NOT ACCEPTABLE receive ft	Firmed	-	8/31/18	24 ft	0 ft	24 ft	\$12.654583/ft	\$303.71
8	MT-O1-B-0.375X0.500			Tool Steel Bar 0.375" X 0.500"	Firmed	-	9/6/18	6 ft	0 ft	6 ft	\$26.65/ft	\$159.90
9	MT-O1-R0.375			Tool Steel Round Bar 0.375 dia.	Firmed	-	9/6/18	6 ft	0 ft	6 ft	\$6.65/ft	\$39.90

Grand Total: \$2,858.41

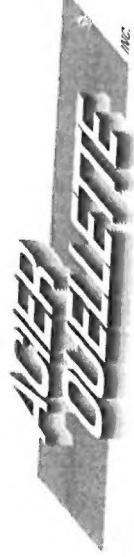
## Order Notes

- Procurement Quality Clauses  
A005 right of entry  
A012 chemical and physical test report  
A016 personnel qualification  
A017 raw material identification (as applicable)  
A026 certification of material conformance  
A041 quality management system  
A042 part notification by supplier  
A043 retention of quality documents  
A048 counterfeit parts avoidance, detection, mitigation and disposition program  
A049 supplier awareness

Terms & Condition of Purchasing(Suppliers) and Procurement Quality Clauses are an integral part of our AS9100 requirements. To learn in detail, please visit [www.dartaerospace.com](http://www.dartaerospace.com) for further explanation.

CL

Plex 8/28/18 3:20 PM dart.lavoie.chantal



ACIER OUELLETTE INC.

935, Boul. du Havre

DELIVERY - CLIENT

COPY

三

**Billed to** DART AEROSPACE LTD  
**Shipped to**

Instruction F-M

Att : CHANTAL LAVOIE Tél.: 613-632-5200  
**Delivery Route** 5

### **Product Description**

Product Description	Weight	Qty	UM	PCS NB						Internal Use Only			
				CMD	EXP	B/O	IN	I	S	C	OUT		
<b>1 ROUND ALU 3/4 6061-T6 *</b> RAL-34 3 X 20' HEAT : 68706	31.38		60.00	PI_\$CLB									
<b>2 ROUND ALU 5/8 6061-T6 *</b> RAL-5 1 X 6' HEAT : SXA171313	138.24		6.00	PI_\$CLB	3x20								
<b>3 SQUARE SS 1.5 303 NS</b> CSS-1303 2X	81.60		24.00	PI_\$CLB		1X6							
<b>4 ROUND SS 5/8 303 RANDOM NS</b> RSS-58303-V 1X AC19280-SM-2018/09/10 HEAT : 891B	12.52		12.00	PI_\$CLB			1X21						
<b>5 ROUND SS 1.304 (R)</b> RSS-1 2X HEAT : 830W	64.08		24.00	PI_\$CLB				2X134					
<b>6 ROUND TOOL STEEL 5/8 H13 NS</b> RH13-58 1X AC19282-H4-2018/09/05 Heat : B229392	12.52		12.00	PI					16.75	13.1983			

RAL-34 # 5157

TRA-1723 49072

### Test de dureté Rockwell Rockwell Hardness Test

Client / Customer : LES ACIERS TRANSBEC (1997) LTEE.

Adresse / Address : 4054 BOUL. LE CORBUSIER, #201  
LAVAL, QC  
H7L5R2

# commande order # : 7020941

# bon de commande / Purchase order # : OU-47416

# de matrice / Die # : MS 9909 Description : 3/4"ROD

Alliage & trempage / Alloy & temper : 6061 T6 Longueur / Length : 6097 mm

# Contrôle / Control # : 85611-1

# Coulée / Cast # : 68706

Dureté Rockwell E / Min. requis / Max. permis /  
Rockwell E hardness : 91 HRE Min. required : 88 HRE Max. permitted : 100 HRE

Composition chimique typique / Typical chemical composition :

	Si	Fe	Cu	Mn	Mg	Cr	Zn	Ti
6063	0,20 - 0,60	0,35 Max	0,10 Max	0,10 Max	0,45 - 0,90	0,10 Max	0,10 Max	0,10 Max
6005	0,60 - 0,90	0,35 Max	0,10 Max	0,10 Max	0,40 - 0,60	0,10 Max	0,10 Max	0,10 Max
6005A	0,66 - 0,74	0,14 - 0,28	0,08 - 0,16	0,18 - 0,26	0,46 - 0,54	0,03 Max	0,05 Max	0,05 Max
6061	0,40 - 0,80	0,70 Max	0,15 - 0,40	0,15 Max	0,80 - 1,20	0,04 - 0,35	0,25 Max	0,15 Max
6351	0,7 - 1,3	0,5 Max	0,10 Max	0,40 - 0,80	0,40 - 0,80	...	0,20 Max	0,20 Max

Nous certifions que le matériel fourni rencontre les exigences chimiques telles qu'annoncées par la norme ASTM B-221-14 excepté pour la section 8.2 (nombre de spécimen).

We hereby certify that the material supplied meets the chemical properties as published by the ASTM B-221-14 except for section 8.2 (number of specimen).

Sincèrement vôtre,  
Yours truly,

date : 2017-03-28

Daniel Alfredo Pelletier  
Directeur Qualité  
Quality Director

**SPECIFICATION CONTROL DRAWING**

PURCHASE MATERIAL 6061-T6(T651/T6510/T6511/T62) ALUMINUM ROUND BAR

QQA-225/B OR AMS-QQA-225/B (OR AMS 4117412/41154116)  
OR QQA-2008 OR AMS-QQA-2008 (OR AMS 4160)  
OR ASTM B211 OR ASTM B211

DADT WOULD

PART I NUMBER:

WHERE "D.DDD" = DIAMETER IN INCHES  
FIG. 568" ROUND BAR - M5064T20 205

MERRILL LIBRARY - MARCH 11, 1925

RELEASED  
R 2009-09-09

B	REFORMAT Dwg. ADD B311& B321 SPEC (ZN DR-1, REF PAR 08/0704A)	CP	09/07/13
A	NEW ISSUE	DS	01/06/08
	REV.	BY	DATE
DESCRIPTION		DART AEROSPACE LTD	
		HAWKESBURY, ONTARIO, CANADA	
		DRAWING NO.	REV. B
		M6061T6R	SHEET 1 OF 1
		TITLE	SCALE
		600-1-T6 ROUND BAR	NTS
		COPYRIGHT © 2011 DART AEROSPACE LTD	
		No unauthorized copying or reproduction of this drawing is permitted.	

## MATERIAL RECEIPT INSPECTION FORM

MATERIAL: M6061T6R0.750  
 DATE: 18/01/17

PO / BATCH NO.: P0040866/110759

MATERIAL CERT REC'D: Yes  
 QUANTITY RECEIVED: 60ft  
 QUANTITY INSPECTED: 60ft  
 QUANTITY REJECTED: 0

THICKNESS ORDERED: 0.750"  
 THICKNESS RECEIVED: 0.750"  
 SHEET SIZE ORDERED: -  
 SHEET SIZE RECEIVED: -

DESCRIPTION	NCR (Check Y/N)	COMMENTS
SURFACE DAMAGE	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N	
CORRECT FINISH	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N	
CORROSION	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N	
CORRECT GRAIN DIRECTION	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N	
CORRECT MATERIAL PER M-DRAWING	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N	<i>ASTM B21</i>
CORRECT THICKNESS	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N	
PHOTO REQUIRED	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N	
CORRECT REF # TO LINK CERT	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N	<i>HT: 68706</i>
CORRECT MATERIAL IDENTIFICATION	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N	
CORRECT M# ON THE MATERIAL	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N	
DOES THIS MATERIAL REQUIRE ENGINEERING SIGN OFF	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N	
DOES THIS REQUIRE AN EXTRUSION REPORT	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N	

CUT SAMPLE PIECE OF MATERIAL AND PERFORM A HARDNESS CHECK. RECORD RESULTS BELOW					
TYPE OF MATERIAL SIZE OF TEST SAMPLE HARDNESS / DUROMETER READING	HRC	HRB	DUR A	DUR D	WEBSTER

*testers located in the Quality Office*

QC 18 INSPECTION		ENGINEERING SIGNOFF (if required)	
INSPECTED BY:	<u>AJ</u>	SIGNED OFF BY:	
DATE:	<u>18/01/17</u>	DATE:	

Attach this inspection sheet with the corresponding material cert and remit to be scanned and received in

S176

RAL-S-V

TRAI 2001

4951



**GVA**  
Global Vietnam  
Aluminium Co., Ltd

GLOBAL VIETNAM ALUMINIUM COMPANY LIMITED

Address: MY XUAN B1-CONAC INDUSTRIAL ZONE, MY XUAN TOWN, TAN THANH DISTRICT,  
BA RIA VUNG TAU PROVINCE, VIETNAM  
Tel: +84(0)643924954  
Fax: +84(0)643924953

### MILL TEST CERTIFICATE

Date: 8 August, 2017

PO number: 17-P-292

Shipping Ref No.: 17-1489

LC No.: DC HMN713076

Date of issue: 28 July, 2017

Item Code: 1075703

Doc Number: D00530

Alloy & Temp: 6061-T6511

Production Description: CUSTOM ALUMINIUM EXTRUSION (Round Bar)  
Round Bar 5" x 12' 6061-T6511

Length (inch): 144

Buadle number: 17-P-292-032, 17-P-292-035, 17-P-292-034, 17-P-292-033

Heat Number: SXA171313

Date: 24/07/2017

Applicable Specifications: ASTM B221 STANDARDS

#### CHEMICAL ANALYSIS: %

Si	Mg	Fe	Cu	Mn	Cr	Zn	Ti	Al	Other		Remark:
									RACH	TOTAL	
0.659	0.993	0.240	0.264	0.017	0.088	0.013	0.022	98.619	<0.05	<0.10	21/7/2017

#### MECHANICAL ANALYSIS:

Ult. Strength (ksi)	Yield Strength (ksi)	Elongation % LN 2"	Remark:
42.1	39.6	14.8	21/7/2017

All profiles, showing material shipped match aluminium alloy as per standard, with chemical analysis to match aluminium alloy standard.

We hereby certify that the item listed have been checked and tested in accordance with the specifications noted and have been found to meet all the applicable requirements. Certifications are kept on file for 36 months from the date of purchase and are available for review upon request, referring to ASTM and the PO number.

\_\_\_\_\_  
Quality Manager:



TRUNG TÂM KIỂM NGHIỆM CÔNG TY  
TNHH NHÔM TOÀN CẦU VIỆT NAM  
GLOBAL VIETNAM ALUMINUM  
CO., LTD TESTING CENTER

## MATERIAL RECEIPT INSPECTION FORM

MATERIAL: M6061T6R5.000  
 DATE: 18/09/17

PO / BATCH NO.: P0040866/S10761

MATERIAL CERT REC'D: Yes  
 QUANTITY RECEIVED: 6ft  
 QUANTITY INSPECTED: 6ft  
 QUANTITY REJECTED: 0

THICKNESS ORDERED: .5000"  
 THICKNESS RECEIVED: .5000"  
 SHEET SIZE ORDERED: -  
 SHEET SIZE RECEIVED: -

DESCRIPTION	NCR (Check Y/N)	COMMENTS
SURFACE DAMAGE	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N	
CORRECT FINISH	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N	
CORROSION	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N	
CORRECT GRAIN DIRECTION	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N	
CORRECT MATERIAL PER M-DRAWING	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N	<i>ASTM B21</i>
CORRECT THICKNESS	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N	
PHOTO REQUIRED	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N	
CORRECT REF # TO LINK CERT	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N	<i>HT.5X4171313</i>
CORRECT MATERIAL IDENTIFICATION	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N	
CORRECT M# ON THE MATERIAL	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N	
DOES THIS MATERIAL REQUIRE ENGINEERING SIGN OFF	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N	
DOES THIS REQUIRE AN EXTRUSION REPORT	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N	

CUT SAMPLE PIECE OF MATERIAL AND PREFORM A HARDNESS CHECK. RECORD RESULTS BELOW					
TYPE OF MATERIAL SIZE OF TEST SAMPLE HARDNESS / DUROMETER READING	HRC	HRB	DUR A	DUR D	WEBSTER

*testers located in the Quality Office*

QC 18 INSPECTION		ENGINEERING SIGNOFF (if required)
INSPECTED BY:	<u>AT</u>	SIGNED OFF BY:
DATE:	<u>18/09/17</u>	DATE:

Attach this inspection sheet with the corresponding material cert and remit to be scanned and received in

# SPECIFICATION CONTROL DRAWING

PURCHASE MATERIAL M6061-T6/T6510/T6511-T62 ALUMINUM ROUND BAR  
SPECIFICATION:

QQ-A-2258 OR AMS-QQ-A-2258 (OR AMS 4117/4128/4115/4116)  
OR QQ-A-2008 OR AMS-QQ-A-2008 (OR AMS 4180)  
OR ASTM B211 OR ASTM B221

PART NUMBER:  
M6061T6RID.DDD  
| DIA.

WHERE "D.DDD" = DIAMETER IN INCHES

EG. 5/8" ROUND BAR = M6061T6R0.625



RELEASED  
2009-09-09  
*MH*

B	REFORMAT DNG ADD B211& B221 SPEC (ZN D8-1), REF PAR 08-020A	CP	09-07-13
A	NEW ISSUE		DS 01-06-08
REV.		BY	DATE
DESIGN		DART AEROSPACE LTD	
DRAWN		HAWKESBURY, ONTARIO, CANADA	
CHECKED		DRAWING NO.	REV. B
MFG. APPROVED		M6061T6R	SHEET 1 OF 1
DE APPR		TITLE	SCALE
DATE	09.07.13	6061-T6 ROUND BAR	NTS
		COPYRIGHT © 2001 DART AEROSPACE LTD	
		ALL RIGHTS RESERVED. THIS DRAWING IS THE PROPERTY OF DART AEROSPACE LTD. IT IS TO BE KEPT CONFIDENTIAL AND NOT COPIED OR DISCLOSED WITHOUT THE WRITTEN CONSENT OF DART AEROSPACE LTD.	

107252

Dart

19280N

NORTH AMERICAN  
STAINLESS

## METALLURGICAL TEST REPORT

6870 Highway 42 East  
Ghent, KY 41045-9615  
(502) 347-6000

Certificate: 433808 02 Mail To:

Ship To:

Date: 8/01/2018 Page: 1 of 1

Steel: 303

Finish: Cold Draw

Dia/Thk: .6250 in

Leg Length:

Length: 144.00 in

Corrosion:

Customer:

NAS Order:

Your Order:

Heat Treat Code: 48,357

Item Code:

PRODUCT DESCRIPTION:REMARKS:

Round Bar, Annealed, Cold Draw  
 UNS 30300, ASTM A582M17 EN 10204 3.1, ASTM A484/18  
 AMS 5640V TYPE 1, QQS-764B CONDITION A  
 SOLUTION ANNEAL TEMP 1900F MIN, ASTM F899/12B

COMPLIES W/REQUIREMENTS OF DFAR 252.225-7009 EU DIRECTIVE  
 2011/65/EU.RoHS. EAF+AOD+CC. NO WELD REPAIR. MELTED AND MFG  
 IN USA FREE FROM MERCURY AND LOW MELTING ALLOY CONTAMINATION

| Bundle Weight |
|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|
| BJ71547       | 3192          |               |               |               |               |               |               |               |               |

## CHEMICAL ANALYSIS CM(Country of Melt) ES(Spain) US(United States) ZA(South Africa) JP(Japan)

ANAB, ISO/IEC 17025, Certificate# L2323  
Chemical Analysis per ASTM A751/14a

NAS Heat	Supplier Heat	CM	C %	CO %	CR %	CU %	MN %	MO %	N %	NI %	P %	S %
891B	US	.037	.10	17.15	.30	1.85	.321	.039	8.48	.032	.3370	
SI %												
.46												

## MECHANICAL PROPERTIES

I	t	HB	.2YS	UTS	RA	Elong	
o	i	No.	KSI	KSI	%	% 4D	
BJ71547	R L	208.0	83.95	107.52	34.73	24.37	

NAS hereby certifies that the analysis on this certification is correct. Based upon the results and the accuracy of the test methods used, the material meets the specifications stated. These results relate only to the items tested and this report cannot be reproduced, except in its entirety, without the written approval of NAS

Technical  
Dept.Mgr.

KRIS LARK

# SPECIFICATION CONTROL DRAWING

PURCHASE MATERIAL: AISI 1003 SS ROUND BAR  
(NOTE: AISI 304/316 NOT ACCEPTABLE)

△ SPECIFICATION:  
ASTM A582  
PART NUMBER:  
M303R(D.DD)  
DIA.

WHERE "D.DDD" = DIAMETER IN INCHES  
EG: 0.75" ROUND BAR = M303R0.750

**RELEASER**  
**R 2010-02-02**

B	REFFORMAT Dwg ADD Specs (Zn08-1)	CP	10/01/05
A	REF PAR 08-000A	DS	01/12/20
REV	NEW ISSUE	DATE	BY
DESCRIPTION			
DESIGN	DART AEROSPACE LTD		
DRAWN	HAWKESBURY, ONTARIO, CANADA		
CHECKED	REV. B		
MFG. APPR	SHEET 1 OF 1		
APPROVED	SCALE		
DE APPR	NTS		
DATE	COPYRIGHT © 2008 BY DART AEROSPACE LTD		
10.01.05			

# MATERIAL RECEIPT INSPECTION FORM

MATERIAL: M303RD.625  
 DATE: 18/09/17

PO / BATCH NO.: P0040866 / S110762

MATERIAL CERT REC'D: Yes  
 QUANTITY RECEIVED: 12.083 ft  
 QUANTITY INSPECTED: 12.083 ft  
 QUANTITY REJECTED: 0

THICKNESS ORDERED: 0.625"  
 THICKNESS RECEIVED: 0.625"  
 SHEET SIZE ORDERED: —  
 SHEET SIZE RECEIVED: —

DESCRIPTION	NCR (Check Y/N)	COMMENTS
SURFACE DAMAGE	Y <input checked="" type="radio"/>	N
CORRECT FINISH	Y <input checked="" type="radio"/>	N
CORROSION	Y <input checked="" type="radio"/>	N
CORRECT GRAIN DIRECTION	Y <input checked="" type="radio"/>	N
CORRECT MATERIAL PER M-DRAWING	Y <input checked="" type="radio"/>	N
CORRECT THICKNESS	Y <input checked="" type="radio"/>	N
PHOTO REQUIRED	Y <input checked="" type="radio"/>	N
CORRECT REF # TO LINK CERT	Y <input checked="" type="radio"/>	N
CORRECT MATERIAL IDENTIFICATION	Y <input checked="" type="radio"/>	N
CORRECT M# ON THE MATERIAL	Y <input checked="" type="radio"/>	N
DOES THIS MATERIAL REQUIRE ENGINEERING SIGN OFF	Y <input checked="" type="radio"/>	N
DOES THIS REQUIRE AN EXTRUSION REPORT	Y <input checked="" type="radio"/>	N

CUT SAMPLE PIECE OF MATERIAL AND PREFORM A HARDNESS CHECK. RECORD RESULTS BELOW					
TYPE OF MATERIAL SIZE OF TEST SAMPLE HARDNESS / DUROMETER READING	HRC	HRB	DUR A	DUR D	WEBSTER

*testers located in the Quality Office*

QC 18 INSPECTION		ENGINEERING SIGNOFF (if required)	
INSPECTED BY:	<u>Ar</u>	SIGNED OFF BY:	
DATE:	<u>18/09/17</u>	DATE:	

Attach this inspection sheet with the corresponding material cert and remit to be scanned and received in

CERTIFICATE OF COMPLIANCE / CERTIFICAT DE CONFORMITÉ

Order No. / No. Commande <b>AC00019299</b>	CUSTOMER / CLIENT <b>LES ACIERS OUELLETTE INC</b>	Packing slip / No. d'expédition <b>L50750-01</b>	DATE <b>07-09-18</b>
MATERIAL ID# / No. MATÉRIEL <b>2013-2594</b>	GRADE / NUANCE <b>H-13</b>	HEAT TREATMENT / TRAITEMENT THERMIQUE <b>ANNEALED / RECUIT ADOUCI</b>	HEAT / COULÉE <b>B29392</b>
PAYS D'ORIGINE <b>UKRAINE</b>			
SHAPE / FORME <b>Round / Rond</b>	SIZE / DIMENSION <b>.6250" in.</b>	SPECIFICATIONS <b>ASTM A681</b>	

**CHEMICAL COMPOSITION / ANALYSE CHIMIQUE**

	Carbon (C)	Silicon (Si)	Manganese (Mn)	Phosphorus (P)
mini/maxi	0.320	0.450	0.800	1.250
actuel (%):	<b>0.380</b>	<b>0.990</b>	<b>0.370</b>	<b>0.024</b>
	Sulfur (S)	Chromium (Cr)	Nickel (Ni)	Molybdenum (Mo)
mini/maxi	0.030	4.750	5.500	—
actuel (%):	<b>0.003</b>	<b>4.990</b>	<b>0.160</b>	<b>1.300</b>
	Copper (Cu)	Vanadium (V)	Aluminium (Al)	Tungsten (W)
mini/maxi	—	0.800	1.200	—
actuel (%):	<b>0.100</b>	<b>0.970</b>	<b>0.025</b>	<b>0.000</b>

**MECHANICAL PROPERTIES / PROPRIÉTÉS MÉCANIQUES**

Yield strength / Élasticité	Tensile / résistance à la traction	Elongation / allongement (%)	Reduction of area / surface (%)	surface hd/dureté
PSI	PSI	—	0.0%	207 BHN

No weld repairs performed during the manufacturing of this product. We hereby certify that the above results have been verified and conform to the above mentionned specifications.

Aucune réparation exécutée par soudure durant la fabrication de ce produit. Par la présente nous attestons que les résultats ci-haut mentionnés ont été vérifiés et sont conformes aux spécifications.

*Keith BALL*

## SPECIFICATION CONTROL DRAWING

PURCHASE MATERIAL:

ANSI H13

COOL STEEL ROUND BAR

SPECIFICATION:

AISI H13

PART NUMBER:

MT-H13-R [D,DDD]

WHERE "D,DDD" = DIAMETER IN INCHES

E.G. 5/8" ROUND BAR = MT-H13-R0.625

REV.	DESCRIPTION	DATE	BY	APPROVED
A	NEW ISSUE	17.09.20	SAC	WM

D

C

B

A

**DART**  
AEROSPACE  
Hawthorne, NJ USA

**MT-H13 TOOL STEEL ROUND BAR**

REV. A

SPN. NO.

DESIGNED BY: SAC 200908202017 DRAWN BY: SAC 200908202017 CHECKED BY: VA 09212017 APPROVED BY: LO 09212017 DATE: 2009/08/2017 SCALE: NTS WEIGHT: N/A

FRACTIONAL: 3/8 ANGLES: 1/2 SURFACES: 1. UNLESS OTHERWISE SPECIFIED, ALL DIMENSIONS ARE IN INCHES. 2. PARTS ARE TO BE TURNED TO SIZE AND THEN PLATED. 3. DIMENSIONAL LIMITS & TOLERANCES ARE TO BE APPLIED AFTER PLATING.

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SHEET 1 OF 1

8

6

4

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2

## MATERIAL RECEIPT INSPECTION FORM

MATERIAL: MT-413-R0.625  
 DATE: 18/09/17

PO / BATCH NO.: P0040866/5110763

MATERIAL CERT REC'D: Yes  
 QUANTITY RECEIVED: 6ft  
 QUANTITY INSPECTED: 6ft  
 QUANTITY REJECTED: 0

THICKNESS ORDERED: 0.625"  
 THICKNESS RECEIVED: 0.625"  
 SHEET SIZE ORDERED: -  
 SHEET SIZE RECEIVED: -

DESCRIPTION	NCR (Check Y/N)	COMMENTS
SURFACE DAMAGE	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N	
CORRECT FINISH	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N	
CORROSION	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N	
CORRECT GRAIN DIRECTION	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N	
CORRECT MATERIAL PER M-DRAWING	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N	<u>H-12</u>
CORRECT THICKNESS	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N	
PHOTO REQUIRED	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N	
CORRECT REF # TO LINK CERT	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N	<u>R24372</u>
CORRECT MATERIAL IDENTIFICATION	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N	
CORRECT M# ON THE MATERIAL	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N	
DOES THIS MATERIAL REQUIRE ENGINEERING SIGN OFF	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N	
DOES THIS REQUIRE AN EXTRUSION REPORT	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N	

CUT SAMPLE PIECE OF MATERIAL AND PERFORM A HARDNESS CHECK. RECORD RESULTS BELOW					
TYPE OF MATERIAL SIZE OF TEST SAMPLE HARDNESS / DUROMETER READING	HRC	HRB	DUR A	DUR D	WEBSTER

testers located in the Quality Office

QC 18 INSPECTION	ENGINEERING SIGNOFF (if required)
INSPECTED BY: <u>AJ</u>	SIGNED OFF BY: _____
DATE: <u>18/09/17</u>	DATE: _____

Attach this inspection sheet with the corresponding material cert and remit to be scanned and received in



**CERTIFICATION DU MATÉRIEL**

**CLIENT:**  
SALABERRY-DE-VALLEYFIELD

**ACIER OUELLETTE INC DIV.DE**

935 BOUL DU HAVRE  
SALABERRY-DE-VALLEYFIELD, QUEBEC  
QC J6S 5L1

**NUMÉRO DE COMMANDE:** 14975896 000020

**COMMANDE DU CLIENT:** ac00018459 20

**NUMÉRO DE PIÈCES:**

**NUMÉRO DE LIVRAISON:** 803802592 000020

**NUMÉRO D'ARTICLE:** 160008471

**DESCRIPTION INVENTAIRE:** RD CF 304/304L ANN 1 X 144RL

**DESCRIPTION ARTICLE FINIS:** INOX Barre RD FF(CF) 304/304L  
1po X 144po LA

**NUMERO (S) DE COULEE** BRAME / BOBINE / TIN (le cas échéant)

830W

BJ6071 8

**CERTIFICATION**

Un sondage de nos sources matérielles a indiqué que ni le mercure ni des substances radioactives ne sont introduits dans leurs produits ni ne sont utilisés dans aucun de leurs procédés. Alors que nous ne faisons aucun test indépendant pour le mercure ou la radiation, il n'y a rien dans le système de qui pourrait entraîner la contamination de l'un ou l'autre type.

Ce document certifie que le matériel décrit ci-dessus a été expédié conformément à votre commande. Le producteur du matériel a certifié à qu'il a été produit conformément aux spécifications suivantes:

ASTM A276 A479 UNS S30403 AMS 5639 5647 QQ-S-763 ASME SA479

07/30/2018

Thomas Endres

Vice-président - Approvisionnement

# SPECIFICATION CONTROL DRAWING

PURCHASE MATERIAL: AISI 304/316 SS ROUND BAR  
(NOTE: AISI 303 NOT ACCEPTABLE)  
SPECIFICATION:  
PART NUMBER:  
M304R[D.DD]  
ASTM A276  
M304R[D.DD]  
DIA.

WHERE "D.DD" = DIAMETER IN INCHES  
EG. 0.75" ROUND BAR = M304R0.750

RELEASED  
CBZ/MS

B	REFORMED DWG. ADD SPEC'S (EN D6-1).	CP	09/07/15
A	NEW ISSUE	AS	08/03/03
REV.		BY	DATE
DESIGN	AJS	DART AEROSPACE LTD	
DRAWN	<u>AJS</u>	HAWKESBURY, ONTARIO, CANADA	
CHECKED	<u>AJ</u>	DRAWING NO.	M304R
MFG. APPR.	<u>AJ</u>	TITLE	304/316 ROUND BAR
APPROVED	<u>AJ</u>	DATE	09/07/15
DE APPR.		SCALE	1:1
		NOTES	Copyright © 2008 by DART AEROSPACE LTD No part of this drawing may be reproduced without written permission from DART Aerospace Ltd. This drawing is the property of DART Aerospace Ltd. It is to be returned to DART Aerospace Ltd. upon completion of its purpose or if it is no longer required. It is illegal to copy or reproduce this drawing without the express written consent of DART Aerospace Ltd.

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# MATERIAL RECEIPT INSPECTION FORM

MATERIAL: M304 R1.000  
 DATE: 18/09/17

PO / BATCH NO.: P0040866/5110764

MATERIAL CERT REC'D: Yes  
 QUANTITY RECEIVED: 27.958ft  
 QUANTITY INSPECTED: 27.958ft  
 QUANTITY REJECTED: 0

THICKNESS ORDERED: 1.000"  
 THICKNESS RECEIVED: 1.000"  
 SHEET SIZE ORDERED: -  
 SHEET SIZE RECEIVED: -

DESCRIPTION	NCR (Check Y/N)	COMMENTS
SURFACE DAMAGE	<input checked="" type="radio"/> Y <input type="radio"/> N	
CORRECT FINISH	<input checked="" type="radio"/> Y <input type="radio"/> N	
CORROSION	<input checked="" type="radio"/> Y <input type="radio"/> N	
CORRECT GRAIN DIRECTION	<input checked="" type="radio"/> Y <input type="radio"/> N	
CORRECT MATERIAL PER M-DRAWING	<input checked="" type="radio"/> Y <input type="radio"/> N	
CORRECT THICKNESS	<input checked="" type="radio"/> Y <input type="radio"/> N	
PHOTO REQUIRED	<input checked="" type="radio"/> Y <input type="radio"/> N	
CORRECT REF # TO LINK CERT	<input checked="" type="radio"/> Y <input type="radio"/> N	
CORRECT MATERIAL IDENTIFICATION	<input checked="" type="radio"/> Y <input type="radio"/> N	
CORRECT M# ON THE MATERIAL	<input checked="" type="radio"/> Y <input type="radio"/> N	
DOES THIS MATERIAL REQUIRE ENGINEERING SIGN OFF	<input checked="" type="radio"/> Y <input type="radio"/> N	
DOES THIS REQUIRE AN EXTRUSION REPORT	<input checked="" type="radio"/> Y <input type="radio"/> N	

CUT SAMPLE PIECE OF MATERIAL AND PERFORM A HARDNESS CHECK. RECORD RESULTS BELOW					
TYPE OF MATERIAL SIZE OF TEST SAMPLE HARDNESS / DUROMETER READING	HRC	HRB	DUR A	DUR D	WEBSTER

*testers located in the Quality Office*

QC 18 INSPECTION	INSPECTED BY: <u>AM</u>	DATE: <u>18/09/17</u>	ENGINEERING SIGNOFF (if required)
			SIGNED OFF BY: _____ DATE: _____

*Attach this inspection sheet with the corresponding material cert and remit to be scanned and received in*